

# OAK RIDGE OFFICE OF ENVIRONMENTAL MANAGEMENT



**The U.S. Department of Energy's (DOE) Oak Ridge Reservation occupies more than 32,000 acres within Anderson and Roane counties in East Tennessee. It contains three sites—the Y-12 National Security Complex (Y-12), Oak Ridge National Laboratory (ORNL), and East Tennessee Technology Park (ETTP).**

In previous decades, those sites conducted research and operations that created environmental legacies and placed Oak Ridge on the U.S. Environmental Protection Agency's National Priorities List in 1989. Today, OREM is responsible for advancing environmental cleanup at all three sites. Our projects are protecting the region's health and environment by removing risks, enabling modernization at national security and science sites, and transferring cleaned land to the community to boost new economic growth.

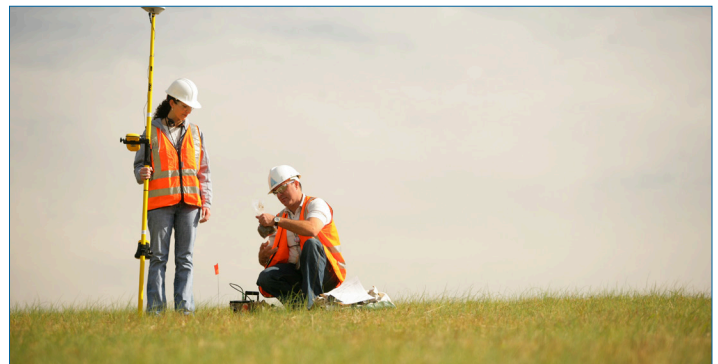
## PROTECT THE REGION'S HEALTH AND ENVIRONMENT

Our projects are focused on removing hazards or potential risks to human health or the surrounding environment. They involve taking down old and contaminated buildings, removing inventories of radiological waste stored at the site, and addressing any affected soil and groundwater.



## MAKE CLEAN LAND AVAILABLE FOR FUTURE USE

Our work at ETTP has transformed a shuttered uranium enrichment complex into a multi-use industrial center. We removed all the old structures and transferred 1,700 acres to the community that are attracting new investments and businesses to the region. We also set aside more than 3,000 acres for conservation and recreational use.



## ENABLE RESEARCH AND NATIONAL SECURITY MISSIONS

We are actively demolishing excess and contaminated buildings at Y-12 and ORNL. These projects are helping protect thousands of employees who work at these sites, and they are also clearing space for new facilities that will support research and national security missions.



## Oak Ridge National Laboratory

ORNL employs more than 6,000 researchers and staff who are advancing almost every field of research in DOE's broad portfolio. The site dates back to the Manhattan Project, and many of the facilities in the heart of ORNL were built and operated in the 1940s–1960s.

OREM is slated to remove more than **200 facilities** at ORNL. More than 30 of those structures are considered high-risk buildings due to structural, radiological, or chemical hazards. Major cleanup is already underway. Crews have taken down two former reactor facilities in recent years, and they are busy preparing nearly a dozen other reactor facilities and isotope labs for near-term demolition.



Removing the reactor vessel from the Oak Ridge Research Reactor

The nation's **inventory of uranium-233** is housed at ORNL, and its removal is our highest priority at that site. Processing operations are underway to convert the remaining inventory into a disposal-ready form. Through an innovative partnership with TerraPower, the project is also providing rare medical isotopes for next-generation cancer treatment research. We are scheduled to finish processing and disposing of the remaining material in the late 2020s.

## Y-12 National Security Complex

More than 8,000 employees work at Y-12 supporting its mission to maintain the safety, security, and effectiveness of the U.S. nuclear weapons stockpile. Many of the facilities there were constructed and operated during the Manhattan Project and Cold War. Y-12 is ushering in a new chapter with numerous infrastructure projects underway that will keep it at the forefront of its field.

Our cleanup is enabling that transformation from old to new. We anticipate removing nearly **80 facilities** at Y-12 in the decades ahead. Of



Demolition underway on Alpha-2 at Y-12

those, more than 25 are considered high-risk, and a portion of those were deemed "the worst of the worst" in the entire DOE complex in a report to Congress.

Crews are already reshaping the landscape. They demolished the former **Biology Complex**, opening an 18-acre area for NNSA to construct its new Lithium Processing Facility. Workers have started tearing down **Alpha-2**. This marks OREM's largest demolition to date at Y-12, and it is the first project to remove a former enrichment building at the site. Crews are also actively preparing **Beta-1**, another former enrichment facility, for near-term demolition.

Before demolition can begin on some of the site's oldest and largest buildings, OREM must complete construction on the **Mercury Treatment Facility**. That work is scheduled for completion in 2027. This facility will prevent mercury releases into the nearby creek as crews demolish massive mercury-contaminated buildings and remove the sources of mercury trapped in the soil beneath them.

## East Tennessee Technology Park

The K-25 plant was constructed during the Manhattan Project to enrich uranium for the first atomic weapon using the gaseous diffusion process. Due to the success of this technique, the original plant was expanded during the Cold War, but it was eventually closed in 1987. Shortly after, OREM was formed and began addressing the deteriorating facilities and associated hazards created during decades of uranium enrichment.

The site was renamed the East Tennessee Technology Park in 1997. Along with cleanup, OREM pursued a vision to transform the site from a liability into a multi-use industrial center, national park, and conservation area that benefits the community and creates new economic opportunities. In 2020, OREM completed DOE's largest-ever cleanup effort when it finished taking down 500 structures at the site. Together, those facilities had a footprint that could cover 225 football fields. The final phases of cleanup involve soil and groundwater remediation. Crews finished **soil remediation** in 2024, and OREM is working to complete any needed **groundwater remediation** in the years ahead.



East Tennessee Technology Park

We've transferred more than 1,700 acres of land to the community for reuse and economic development, and more than 900 more are scheduled for transfer in the next three years. This area is now home to more than 20 private businesses that have announced \$1.35 billion in investments at the site.